

# Japanese Learners of English and Reflexive Pronouns

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**Abstract:** Learning a second language is a complex process that builds up an interlanguage that includes aspects from both the first and second language. Overtime, it is hoped that the influences from the first language are reduced so the interlanguage becomes more like the target language. The area under the microscope in this article is anaphora, an area which generally speaking, neither a learner nor a teacher would pay much attention to - as most if not all languages have anaphora with very similar behaviour on the surface. If we look under the proverbial bonnet however, it is argued here that the system behind Japanese and English anaphora are fundamentally different, which has implications for how English reflexive pronouns are acquired by Japanese learners of English. The viewpoint advanced here is that Japanese reflexive pronouns are pragmatically regulated, while English reflexive pronouns (by and large) are syntactically regulated, which can be captured theoretically using the Emergentist Reflexivity Approach model. This is then applied to a second language acquisition situation and explores how this may help steer a learner's acquisition journey.

**Keywords:** binding, reflexive pronoun, anaphora, second language, transfer

## 1. Introduction

In learning a second language, the anaphoric system would be one of the few things that would not come to the forefront of a learner's mind. Learning about a few pronouns or reflexives does not seem to be an insurmountable task, and if the language allows for zero pronouns, the mission appears to be more focused on how to use these anaphoric devices in a native-like manner. For instance, in Sorace and Filiaci's (2006) Interface Hypothesis, it is predicted that the learner will have trouble coordinating between syntactic and discourse information; the zero anaphor evidence they studied confirmed their predictions. When a Japanese learner of English meets an English reflexive pronoun in a sentence such as *I hit myself*, nothing appears deceptive as if the teacher performs a self-hitting action and contrasts it against *I hit him*, this should inductively help the student understand the reflexive nature of *myself*. Moreover, the student having the skills of deduction would then be able to apply this to other pronoun+*self* forms, and arrive at the conclusion that reflexive pronouns in general exhibit this type of behaviour.

Acquiring a language however, is not simply amassing a number of different forms with different

senses. The student needs to understand how to form sentences with the reflexive, and consider what meaning will be given through the use of different types. The student can be supported by negative evidence showing that *\*himself is hungry* is not a grammatical sentence in English given the subject position of the reflexive pronoun, there are no possessive reflexives which instead require the form of *my own self* and so on and so forth. However, what the student does need to do, which is much harder, is actually ‘set’ the right binding domain in English. For example, how will the learner know that in *David thinks that John likes himself*, it is impossible for *himself* to be anteceded by *David*? Namely, this type of relationship is called ‘long-distance binding’ which is largely absent from English. Nothing from the sentence indicates that this type of relationship is disallowed, but from the surrounding discourse context it should be clear enough for the learner to hone in on *John* being identified with the object of *like*. This however is confounded by long-distance binding being productively present in Japanese, where such dependencies are available (as seen in (2) below). When transferred into English, this can have unwelcome consequences.

The remainder of this article focuses on the characteristics of reflexive pronouns in Standard Japanese and English, comparing and contrasting the forms and behaviour. Following this, given the underlying system differences alluded to above, our attention then moves to how the two systems differ to one another. Finally, the second language acquisition evidence showing that these hurdles for Japanese learners of English exist are reviewed, and then how these hurdles may be dealt with are assessed. Now, we move onto our discussion of the key factors surrounding reflexives in the next section.

## 2. Characterizations of Japanese and English Reflexives

English and Japanese reflexives share little in common, being that Japanese has a much wider range of reflexive pronouns that are allowed in diverse positions which are not found in English. Beginning with English, the form of the reflexive is typically pronoun+*self*, but without any genitive case allowed. English, unlike Japanese, does not have standard simplex (monomorphemic) reflexives such as *self*,<sup>1)</sup> or a compounded reflexive of two simplex reflexives such as *\*self-self*. Structurally, an English reflexive pronoun cannot occur in the subject position.

Japanese, on the other hand, has a wide range of reflexive pronouns. The most commonly studied one is a simplex *zibun*, where it is much freer in its distribution than English reflexives. This also applies to the complex reflexive pronoun+*self*, *karezibun*, and another type of complex reflexive containing two simplex reflexives, *zibunzisin*. Thus, English has one type of reflexive, while Japanese has all three types (cf. Aikawa, 1999).

Apart from these differences in forms, we find key differences in the binding domain of the reflexives in the two languages. Informally, we can consider the binding domain where the reflexive can find a

possible antecedent to bind it. That may be within the same phrase, sentence, or across sentences. Sometimes, an obvious binder is not present, but discourse is able to guide what the intended referent is. We first consider two cases in English (1a-b):

(1a) David<sub>1</sub> thinks that John<sub>2</sub> likes himself<sub>1/2</sub>.

(1b) David<sub>1</sub> told John<sub>2</sub> a story about himself<sub>1/2</sub>.

It is well known that a reflexive pronoun in an argument position strongly resists being bound by an antecedent (*David*) outside the clause that it resides in (1a). Therefore, the only possible antecedent in (1a) is *John*, leading to the conclusion that reflexives are strongly locally orientated. In (1b) however, the situation is now different as *himself* sits in a non-argument position (a prepositional phrase). Consulting native speakers, one will find that while both antecedents are possible binders of *himself*, there is a preference for *David*. One factor that guides this preference is that *David* is the source (cf. Kaiser, Runner, Sussman, & Tanenhaus, 2009), thus *David's* viewpoint is being represented. This being so, we can appeal to logophoricity, where *himself* is being used like a logophoric pronoun. What this means, is that as *David's* viewpoint is being taken (and not the sentence utterer's position), *himself* can be used to express this logophoric viewpoint and be coreferential with *David* at the same time. If we swap *himself* with the alternative pronominal *him*, *David* can continue to be the binder but there is now no logophoric connection (pronouns in English are not used in this way), reducing the preference for *David*. In sum, English reflexives have a strong preference for local binding, however within non-argument positions this preference evaporates.

Shifting to Japanese, let us first consider a canonical example (2):

(2)	Taro <sub>1</sub> -ga	Ziro <sub>2</sub> -ga	zibun <sub>1/2</sub> -o	seme-ta	to	it-ta.
	Taro-NOM	Ziro-NOM	RP-ACC	blame-PST	CMP	say-PST <sup>2)</sup>
	'Taro said that Ziro blamed him/himself.'					

(Aikawa, 1999: 155)

Note that in (2), *zibun* has two possible binders, *Taro* and *Ziro*. While appearing ambiguous, this is a sentence taken out of context, and put into context we would quickly arrive at the intended interpretation. As discussed above in relation to logophoricity, *zibun* is being used logophorically, thus representing *Taro's* perspective, which explains why there is a certain subject orientation interpretation in examples such as these. This thus represents a well-documented case of long-distance binding in Japanese. Note that while the position of the reflexive is in an argument position, the restrictions applying to English are

not applicable here (*zibun* is also free to occur in the subject position). Japanese, however, does have other restrictions on its reflexive pronouns that are not found in English. For example, *zibun* prefers not to occur with physical verbs such as ‘kick’ (Kitagawa, 1986) or inanimate nouns (Sperlich & Kogusuri, Manuscript). Moreover, Japanese is well known for its ‘empathy’ factor as seen in (3):

- (3) Hanako<sub>1</sub>-wa    Taro<sub>2</sub>-ga    zibun<sub>1/\*2</sub>-ni    katte    kure-ta/\*yat-ta  
 Hanako-TOP    Taro-NOM    RP-DAT    buying    give-PST/give-PST  
 yubiwa-o    nakushi-ta.  
 ring-ACC    lose-PST  
 ‘Hanako lost the ring that Taro bought her.’

(Hirose, 2018: 392)

In this example, the utterer of this sentence must empathize with *Hanako*. According to Kuno (1987), the speaker will try and take the perspective of subject, which is why the use of *yatta* cannot be understood to be performed from *Taro*’s perspective. In sum, Japanese has a complex system of reflexivity as compared to English. This is seen in the variety of forms and restrictions found in Japanese, that are rather absent from English.

### 3. Pragmatic versus Syntactic Binding

We now shift to how binding is implemented in Japanese and English, where it is argued that both languages follow separate processes. That is, as argued by Huang (1994, 2000, 2016) and Sperlich (2020), Japanese is a language which regulates its anaphora pragmatically, while English is a language that does so via the sentence processor. As discussed in detail in Sperlich (2020), there are two systems at work, a sentence processor following O’Grady (2005) that deals with the syntactic relations, and a neo-Gricean pragmatic processor following Huang (2000) that deals with the pragmatic relations. While both these processors are at work in both languages, it is in English that the majority of binding cases are handled by the sentence processor, while in Japanese this is done via the pragmatic processor. For the exact mechanisms and further discussion, the reader is encouraged to refer to the references above. Now an overview is given on how the two processes work in each language.

Let us first consider (1a-b) above. Beginning with (1a), long-distance binding cannot be processed by the sentence processor. In a nutshell, the sentence processor works to resolve the dependency immediately to reduce the burden on working memory. As the processor is working through the sentence and meets the verb *like*, it must match the argument roles on the verb with the corresponding arguments in the sentence. Thus, *John*, which occurs before *like* is held until *like* is met, and it is immediately combined

with the verb's argument grid occupying the first position. The verb then looks to the right, finding *himself*. *Himself* is then integrated with the verb, however being referentially dependent it needs the processor to resolve this dependency. *Himself* is thus linked to *John*, the only available dependency on the verb, completing the operation, resulting in a reflexive structure and resulting interpretation. *David* is clearly not on the argument grid of *like*, and the processor does not seek to resolve the dependency with it. Now, considering the non-argument case of (1b), it has been noted already that either antecedent is a possibility, thus it appears that the sentence processor is not immediately resolving the dependency of *himself* as (4) details:

- (4) David told John a story about himself
- |       |                      |
|-------|----------------------|
| TOLD  | STORY                |
| <j d> | <x> → ? → P → j or d |

Instead, the pragmatic processor (P) is responsible for assigning antecedence. What this means is that once the sentence processor meets *himself*, it is associated with the grid of *story*, which only allows a single argument. Thus, the sentence processor is unable to resolve the dependency (there is no other argument associated with *story*). Instead, the pragmatic processor takes over, and resolves it via pragmatic calculations. These are not a random assorted list of factors, but rather they are formally captured by the neo-Gricean apparatus, namely Huang's revised neo-Gricean pragmatic theory of anaphora (detailed in Huang (2016) or Sperlich (2020)). In sum, English allows for a dual solution to its reflexive pronouns - the sentence processor works upon the argument position reflexive, while the pragmatic processor works with the non-argument position.

Japanese, on the other hand, presents a different picture, as we can compare the flexibility of the interpretation of *zibun* to the English non-argument position *himself*. Namely, the mere fact that *zibun* can be long-distance bound shows that the sentence processor is not resolving dependencies immediately, thus pointing to the pragmatic processor's involvement. It is important to point out that unlike English, the sentence processor does not attempt to resolve the dependency in the beginning - Japanese simply uses the pragmatic processor from start to finish.<sup>3)</sup> Secondly, there is a systematic difference in use between *zibun* and *kare* in terms of logophoricity. Considering (2) again, it was pointed out that the use of *zibun* has a logophoric interpretation, which is not associated with the pronominal *kare*. Namely, if the utterer of the sentence wishes that the sentence internal perspective of *David* be taken into account, *zibun* will be used, whereas *kare* does not have this function. This is formalized through a pragmatic Q-scale <*zibun*, *kare*>, whereby the use of *zibun* shows that the utterer is avoiding the interpretation associated with the use of non-logophoric *kare*. While this can account for the use of *zibun*, it is also clear that *zibun* can be locally

bound. What is left out is the fact that a reflexive pronoun also reflexive marks its predicate (a coreferential interpretation provided via an I-implicature). In other words it indicates that the action of the verb acts upon the performer of the action - both arguments share the same identity. Ultimately, the interpretation the addressee arrives at will be guided by the contextual factors which will support the generation of either implicature.

In sum, while this is a rather condensed discussion of sentence and pragmatic processing regarding binding, more can be read in Sperlich (2020) for focused treatment. The interested reader can also see O’Grady (2005) for a detailed treatment of the sentence processor as a whole applied to other areas, and Huang (2016) on his most recent treatment of his theory of anaphora. The key message delivered is that English makes shared use of both its processors to deal with antecedence, but in Japanese only the pragmatic processor does - this theorizing forms the core of Sperlich’s (2020) Emergentist Reflexivity Approach. Now we move onto how this knowledge is applied to second language acquisition.

#### **4. Binding in Second Language Acquisition**

Reflexivity research has received much attention in second language acquisition, mainly due to hypothesis testing surrounding how first language transfer affects the development of the second language, and questions of universal grammar. The focus here is on this first language influence, tracking its stages of impact and offering ways forward to assist a learner to overcome this negative transfer.<sup>4)</sup>

In order to account for transfer effects, there are two theories to consider. One is Sperlich’s (2017) System Exchange hypothesis, and the other is O’Grady’s (2013a) Transfer Calculus. Regarding Sperlich, the System Exchange hypothesis indicates that the problems faced in binding for a learner is traceable to shifting from one system to another - here the pragmatic system to the sentence processor. The learner must garner enough evidence to support the subconscious switch between the two processors, and if this is not successful what we find is persistent long-distance binding in the learner’s English (discussed below). While it is not completely understood what the triggers are for the shift, O’Grady (2013a) indicated that if the L1 process is too costly in the L2 (e.g., it causes processing difficulties), then it will be dropped. Thus, in a sense while the language learner can continue to process long-distance binding in his/her second language English via the pragmatic processor, undoubtedly interpretation issues will arise (along with no input supporting this type of processing apart from non-argument positions) leading to the shift to the sentence processor.

In line with Sperlich (2020) and O’Grady (2013b), the pragmatic reflexive processing routine transferred from Japanese into English will first be dominant, and initially reflexive pronouns will be processed in this manner. Trying to long-distance bind in English is considered to be ungrammatical, where the sentence processor cannot process it. It is possible to repurpose the pragmatic processor for the

job - the problem is that native speakers of English do not generally do this. Therefore, a long-distance interpretation, while found in Japanese, will not be found or implicated in English, leading to a gradual shift to the sentence processor for a preference of locality (in argument positions). Let us now look at the literature for evidence of this.<sup>5)</sup>

To begin a concise overview of the literature on Japanese learners of English (JLE) acquisition of reflexive pronouns, Cook (1990) found that long-distance (LD) binding was present within advanced JLE, where judging and allowance of LD binding was non-native like. In studies that followed, Hirakawa (1990), Broselow and Finer (1991), Thomas (1991a, 1991b, 1993), Tomita (1992), Yoshikawa (1993), Matsumura (1994), Wakabayashi (1996), White et al. (1997), MacLaughlin (1998) and Akiyama (2002) all found that in the early stages of English acquisition, JLE allowed LD binding much more than at the advanced level of English proficiency. At the advanced level, this greatly tapers off, however there still can be some residue LD binding, which suggests that the shift has not been fully completed. From this, it is clear that JLE are slowly moving from a pragmatic based system to a sentence processor binding based system. Also, more evidence can be seen if we consider non-argument reflexives, where Hamilton (1998) noted that JLE allows more LD binding with non-argument reflexives than argument reflexives. Other signs of language transfer are found in Matsumura (2007), who observed that JLE import subjectivity and a viewpoint factor into their English. In sum, the message is that Japanese learners of English over time are able to shift between the two systems, from a pragmatic based one to a sentence processor one.

Is it possible to ‘speed up’ the process? Teaching is one possibility, as White (1995) and White et al. (1996) found that if binding rules are explicitly taught, there is marginal improvement. Thus, spending time on teaching reflexivity cannot hurt, but certainly maximum English input and output better encourages the shift. Without such continued exposure however, there is a danger that that the interlanguage system will revert back to the first language norms. McCormack (2003, 2004) in investigating the language attrition of JLE upon their return to Japan found that their local interpretation of *himself* worsened in the sense that first language influence began to reassert itself. Consequently, it appears that while it is important to provide opportunities for oneself to continue to receive enough input to maintain the language, monitoring one’s usage may also reduce first language influence, in a sense of one trying to catch oneself in an error.

In sum, the evidence shows that JLE are burdened by negative transfer in the beginning stages of their English acquisition, which slowly becomes more target-like as proficiency increases. This evidence supports the hypothesis that learners are shifting from a pragmatic system to the sentence processor system in reflexive pronoun resolution.

## 5. Conclusion

In conclusion, we find that the reflexive form inventory of Japanese and English is quite different, where there are more restrictions in place on the use of Japanese reflexives, but with more freedom for LD binding that is not found in English. Secondly, we reviewed the two systems of reflexivity underlying Japanese and English (following the Emergentist Reflexivity Approach (Sperlich, 2020)), where there is a clear contrast in the pragmatic and sentence processor involvement. It was found that indeed it is possible for Japanese learners of English to overcome the first language transfer in their second language English, but it can be questioned if it is a result to switching to the sentence processor (providing locality) or that the pragmatic mechanism has been revised so that LD binding is no longer a possibility. It is hoped that this brief discussion on this topic can help inform how an Emergentist perspective can be applied to reflexivity in second language acquisition.

## Notes

- 1) In another sense, *self* appears infrequently with its usage being highly restricted, found in newspaper headlines or informally as *Note to self*.
- 2) Abbreviations used: ACC=Accusative case; CMP=Complementiser; DAT=Dative case; NOM=Nominative case; PST=Past tense; RP=Reflexive pronoun; TOP=Topic marker.
- 3) How this difference arose is another issue – see Sperlich (2020) for discussion on the development of both processors from children to adults.
- 4) The language transfer from Japanese into English is considered to be negative, as the ‘rules’ surrounding Japanese reflexive pronouns are different to those found in English.
- 5) See also O’Grady’s (2013b) discussion of his application of his model, which has helped inform my own thinking on the topic.

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